CURRICULAR TEMPLATES 5-1-09

The proposed General Education curriculum consists of ten courses within four broad areas:

- I. Intellectual Inquiry
 - a. Inquiry in the Humanities
 - b. Inquiry in the Natural/Physical/Mathematical Sciences
 - c. Inquiry in the Social Sciences
 - d. Inquiry in Creativity & the Arts
- II. Composition and Communication
 - a. Composition and Communication I
 - b. Composition and Communication II
- III. Quantitative Reasoning
 - a. Quantitative Foundations
 - b. Statistical Inferential Reasoning
- IV. Citizenship
 - a. Community, Culture and Citizenship in the U.S.
 - b. Global Dynamics

For each of these courses, a template will outline: a) the general purpose of the course category, b) the core competencies that the course will address, c) at least one type of assessment that will demonstrate these competencies. A version of these templates will eventually be used by a committee in Undergraduate Studies charged with oversight of the General Education curriculum, and by faculty wishing to submit courses for Gen Ed credit. For this reason, we have attempted to design templates that are sufficiently specific to create coherence among the courses of a particular area, yet broad enough to invite participation by a variety of disciplines and colleges.

Intellectual Inquiry: General Preamble

The courses in the area of Intellectual Inquiry are designed in accordance with the University Senate's recommendation that "We should intentionally set knowing how to learn and think as an essential goal of a general education program. At its best, general education establishes a foundation for critical and thoughtful approaches to solving problems and promotes intellectual development. In the context of disciplinary learning, one intended outcome of general education is the development of evidence-based thinkers: students capable of understanding what critical argument demands and what it offers as a way of understanding ourselves, others, and the world around us." The Senate issued the following guidelines regarding the core elements of the General Education curriculum:

- "ask students to explore the nature of intellectual inquiry within the established, broad knowledge areas;"
- "bring students in contact with faculty, advanced graduate students and others who are engaged in the core activities of a research university;"
- "establish a foundation for critical and thoughtful approaches to solving problems and promote intellectual development."

Thus, the Intellectual Inquiry division of the General Education curriculum is designed around four broad knowledge areas: Humanities, Natural/Physical/Mathematical Sciences, Social Sciences, and Creativity & the Arts. Courses that fulfill these requirements must address all of the learning outcomes within the corresponding curricular template.

However, the organization of these four broad knowledge areas is not intended to discourage multi-disciplinary approaches to critical thinking and problem-solving. Indeed, a multi-disciplinary approach will enrich the curriculum, bring students in contact with current modes of scholarly inquiry, and equip our graduates to draw conclusions and make decisions based on multi-faceted frames of reference.

With that in mind, the following faculty guidelines should be kept in mind:

- 1) While the listed learning outcomes must form part of the course, other learning outcomes may be added, related to the mastery of particular content or of multi-disciplinary approaches to the topics of discussion.
- 2) A single course may be proposed to fulfill the requirements of two (or more) areas, provided that the course addresses the learning outcomes of each of the areas for which it is proposed. However, in such cases, the student may not apply a single course towards multiple General Education requirements; rather, the student will determine which of the requirements to fulfill with that particular course and, in the end, will still take four courses across the category of Intellectual Inquiry. This provision invites faculty to span traditional disciplinary boundaries, in designing and delivering the course.

Intellectual Inquiry – Humanities

The Humanities are united in their reflection upon the human condition as embodied in works of art and literature (including folklore, popular culture, film and digital media), philosophical and religious contemplation and argumentation, language systems, and historical narratives and the activities and events they relate. The principal activities of humanists and, therefore, the principal skills to be inculcated in students relate to *interpretation* and *analysis*, and the *evaluation* of competing interpretations of the same or similar texts and phenomena. In a course fulfilling the Humanities Gen Ed requirement students should learn to interpret, evaluate and analyze such creations of the human intellect.

Students will demonstrate the ability to construct their own artistic, literary, philosophical, religious, linguistic, and historical interpretations according to the standards of the discipline. It is hoped that students learn to recognize (a) the validity of different points of view – whether these points of view devolve from differences of class, race, gender, nationality or even historical period – and (b) a degree of tolerance and mistrust of dogmatism. Further it is hoped that students will be able to recognize some aspects of human life that might be considered eternal and constant and distinguish these aspects from those which are contingent products of history and culture.

- 1) Demonstrate the ability to present and critically evaluate competing interpretations through analysis and argumentation in writing and orally.
- 2) Demonstrate the ability to distinguish different artistic, literary, philosophical, religious, linguistic, and historical schools and periods according to the varying approaches and viewpoints characterized therein.
- 3) Demonstrate the ability to identify the values and presuppositions that underlie the world-views of different cultures and different peoples over time as well as one's own culture. Students will therefore analyze and interpret at least one of the following: works of art, literature, folklore, film, philosophy and religion, language systems or historical narratives (or the primary sources of historical research).
- 4) Demonstrate disciplinary literacy (vocabulary, concepts, methodology) in written work, oral presentations and in classroom discussions.
- 5) Demonstrate the ability to conduct a sustained piece of analysis of some work of art, literature, folklore (or popular culture), film (or other digital media), philosophy, religion, language system, or historical event or existing historical narrative that makes use of logical argument, coherent theses, and evidence of that discipline, with use of library sources when applicable. The student's analysis should demonstrate appropriate information literacy in a particular discipline of the humanities, which, depending on the nature of the assignment might include, for example:

- posing questions that shape an inquiry and identify sources necessary for this purpose
- getting and checking facts
- getting overviews, opposing views, background information, context
- recognizing and finding primary sources and distinguish primary from secondary sources
- identifying scholarly publications (monographs, articles, essays) locating them (library stacks, Internet, other libraries) citing them (MLA, Chicago styles)
- assessing the value of sources

Intellectual Inquiry – Natural/Physical/Mathematical Sciences

An understanding of the natural world is essential for well-educated citizens who work and live in a world strongly influenced by science and technology. At the heart of this General Education Science Inquiry course is this fundamental idea: Scientists advance knowledge through experimentation. Because this course is designed to convey a general understanding of science and the processes of scientific thinking, it will be taught using strategies that reflect the ways scientists work; students likewise will do basic science, engage its methods, with the goal of attaining some understanding of the way science works in and with the natural and social worlds.

Learning Outcomes

By the end of the course, students should be able to:

- 1. Describe methods of inquiry that lead to scientific knowledge and distinguish scientific fact from pseudoscience.
- 2. Explain fundamental principles in a branch of science.
- 3. Apply fundamental principles to interpret and make predictions in a branch of science.
- 4. Demonstrate an understanding of at least one scientific discovery that changed the way scientists understand the world.
- 5. Give examples of how science interacts with society.
- 6. Conduct a hands-on project using scientific methods to include design, data collection, analysis, summary of the results, conclusions, alternative approaches, and future studies.
- 7. Recognize when information is needed and demonstrate the ability to find, evaluate and use effectively sources of scientific information.

Guidelines for Course Designers

Each learning outcome is essential to meeting the requirements of a science inquiry course.

While providing for as much flexibility as possible within science disciplines, the syllabus will include the following:

- A demonstrated focus on the processes of science and scientific thinking;
- A required student product (paper, laboratory report, presentation, etc) based on the hands-on project. This requirement is the curriculum-embedded performancebased assessable product and must be a component of the course grade, weighting at discretion of instructor.
- Information literacy should be integrated into the course.

<u>Intellectual Inquiry – Social Sciences</u>

Although they vary in terms of content and intellectual traditions, foundational courses in the social sciences promote an understanding, based on living bodies of theory and research, of individuals in the context of social interactions, groups, and societies. Human societies are diverse and varied, with different understandings of the world among them, and with a multiplicity of actors within them who do not necessarily share the same views or goals. As a consequence, human phenomena are not as easily predictable as natural phenomena, and social science inquiry can lead to many plausible answers to any given question. Nevertheless, inquiry in the social sciences is empirical, guided by rigorous but varied theories and methods. Thus, students who complete a General Education course in the social sciences should understand how a discipline's modes of scholarly inquiry have led to the development of the discipline's shared bodies of knowledge and the interplay between a social science discipline and its broader social context. The successful social science course will present a variety of approaches to any given question about social phenomena, preparing students to critically evaluate the variety of social situations with which they may be confronted in their everyday lives.

- 1. Demonstrate knowledge of the theories associated with a social science discipline, either broadly or as applied to an important social science topic.
- 2. Demonstrate an understanding of methods and ethics of inquiry that lead to social scientific knowledge.
- 3. Demonstrate an ability to identify and use appropriate information resources to substantiate evidence-based claims.
- 4. Demonstrate knowledge of how a social science discipline influences society.
- 5. Demonstrate an ability to identify a well-formulated question pertinent to a social science discipline and to employ the discipline's conceptual and methodological approaches in identifying reasonable research strategies that could speak to the question.

<u>Intellectual Inquiry – Arts & Creativity</u> Toward Outcomes in Creative Endeavors

Creativity is pertinent to all disciplines. In general education, a focus on creativity adds to the vitality and relevance of learning and will translate into graduates who are better prepared to face the challenges of a dynamic society. Inquiry Courses under this rubric will explore the human need to experience, comprehend, and utilize processes that transcend the conventions of utility, whether that involves the mastery of rules or the decision to break them, the desire to identify and refine the expressible or to recognize and prize the ineffable. The creative process and its products and results are the focus on this course; while they may be taught from the traditional fine arts perspectives, it is expected that courses will also be based on an exploration of the creative and aesthetic aspects of "rational", "scientific" or quantitative disciplines, e.g., the "elegance" of certain scientific/mathematical proofs or the beauty inherent in a well-articulated design.

Learning Outcomes

- Students will personally perform, produce, fabricate or generate an artifact or artifacts that demonstrates their engagement with the creative process (e.g. an object, product, installation, presentation, record of a performance etc.) either as an individual or as part of a collaborative. As part of this process students will:
 - ➤ Define and distinguish different approaches (historical, theoretical, and methodological issues) to "creativity" as appropriate to the disciplinary practices specific to the subject, medium, or approach that informs a particular course.
 - Apply the logic, laws, or constraints of the area of study, (e.g, "out of the box" thinking, or the masterful, elegant treatment of given rules or forms).
 - ➤ Demonstrate the ability to critically analyze work produced by other students in this course and in co-curricular events using appropriate tools. These analyses should utilize relevant information resources to incorporate historical, theoretical, and or cultural factors.
 - > Evaluate results of their own creative endeavors and, using that evaluation, reassess and refine their work.

Guidelines for Course Designers

The primary emphasis of courses in the Area of Inquiry must be on active learning through student performance, expression, and/or production (what is known as "process-focused" creativity). This emphasis should be documented through the number of assignments or class meetings devoted to this work (expressed as a percentage) or through the grading mechanism for the final grade for the course.

Though "process-focused" the course may highlight other approaches to creativity. Students may be expected to explore forms of creativity that are constraint-focused (mastering or overcoming established "laws" or "systems"), product-focused (emphasis on the originality, utility or value of the thing produced), transformation-focused (risk-taking, willingness to make mistakes, role of chance) or fulfillment-focused (personal or

professional accomplishment). Proposals for courses should identify which approaches are present in the syllabi.

Syllabi must incorporate assignments or exercises whose final product reflects a process of analysis, evaluation, reassessment, and refinement.

Syllabi must include projects or exercises that introduce tools or develop information literacy appropriate to the discipline.

Syllabi must incorporate attendance and/or participation in relevant co-curricular activities as part of the course. Students should be required to critically engage with these activities through a written analysis or similar project.

Composition and Communication

While in many universities first-year composition and oral communication are taught as separate courses, the UK General Education curriculum recognizes that speaking, writing, and using visuals effectively are interrelated skills. The Composition and Communication I and II courses are designed to engage students in the practice of composing and communicating ideas using speech, writing, and visuals in an active learning environment. Both courses participate in the broad learning objectives of developing critical thinking and information literacy skills within an academic context that emphasizes the problems and decisions students will confront as educated citizens of the twenty-first century. Students will receive substantial practice in composing, critiquing, and revising ideas for audiences and in developing public speaking and interpersonal communication skills, with a goal of developing life-long habits of writing and speaking for learning, personal expression, and community participation. The proficiencies demonstrated in these courses will then be reinforced throughout the students' major course of study.

Composition and Communication I

In this course, students will demonstrate the ability to

- compose written texts and deliver oral presentations that represent a relevant and informed point of view appropriate for the audience, purpose, and occasion.
- analyze, create and use visuals as a form of communication.
- demonstrate an awareness of appropriate strategies used to communicate effectively in different situations (e.g., large groups, small groups, interpersonal) and contexts (e.g., face-to-face, digital).
- find, analyze, evaluate, and properly document pertinent primary and secondary sources, using relevant discovery tools, as part of the process of preparing speeches, composing texts, and creating visuals.
- develop flexible and effective strategies for organizing, revising, practicing/rehearsing, editing, and proofreading (for grammar and mechanics) to improve the development and clarity of their ideas in ways appropriate to the context.
- define revision strategies for essays, speeches, and visuals, set goals for improving them, and devise effective plans for achieving those goals, in collaboration with peers, the instructor, and librarians.
- engage in a range of small group activities that enable them to explore and express their experiences and perspectives on issues under discussion.

Composition and Communication II

In this course, students will demonstrate the ability to

• compose in writing and deliver orally with visuals (delivered in a face-to-face or digital environment) at least one major project grounded in scholarly research that is appropriate and effective for the audience, purpose, and occasion (The development of one or more major research projects is the course's primary educational focus.).

- conduct significant research on their subject, using the resources of the UK Libraries and other discovery tools, as part of the development of their projects.
- employ more advanced strategies for developing ideas and analyzing arguments, with greater emphasis on addressing and mediating issues of public interest, and with evidence of critical thinking in both the conception and the development of the thesis.
- refine their speaking, writing, and visual communication skills, focusing on matters of construction, design, and delivery style.
- critique the work of self, peers, and professionals.
- revise and rehearse their written and oral presentations, in collaboration with peers, the instructor, librarians, and appropriate members of the public.
- employ and evaluate interpersonal and small group communication skills, as they might apply to personal and professional environments.

Guidelines for Course Designers:

Students should compose multiple drafts of their major assignments, and instructors should review at least one draft, before the final version is presented for a grade. The use of small-group discussion, practice-based activities, and peer review are critical to the success of these courses. Course readings and assignments can be organized around disciplinary and professional contexts or broad interdisciplinary topics, as long as the focus of the course is the development of proficiency in oral, written, and visual communication (as outlined in the learning outcomes) that can be applied to other disciplines and to contexts beyond the university.

Curriculum-Embedded, Performance-Based Assessable Products:

- Formal written texts
- Recorded presentations (e.g., individual speeches, symposiums, panels, audiovisual presentations)
- Revision plans and/or peer reviews
- Written documentation (e.g., self and peer evaluations, application and reflection papers, formal outlines, flowcharts, cluster diagrams, generative lists, or other artifacts of planning and shaping messages)
- Visual products (e.g., the use of presentation software, Web sites, posters, documents incorporating digital images)
- Peer and group reviews of interpersonal interactions/simulations/role plays
- Interpersonal and small group dynamics reflection papers

Quantitative Foundations

Quantitative reasoning (QR) is a conceptual process that employs one or more of a family of mathematical or logistical methods to analyze and solve problems in a variety of disciplines. Such methods guide both deductive and inductive reasoning in mathematics, the sciences (including physical, life, psychological, social, political, and economic sciences), the humanities and arts as well as in engineering, computer science, and information technology. They also have great utility in helping students clarify and critically evaluate information that is relevant to personal life and to everyday decisions about health, finance, citizenship, and government. When these methods are applied to real-world examples and taught in contexts that engage student interest they have been found to improve the capacity of students to draw sound inferences. Quantitative reasoning is multi-disciplinary and invites a wide diversity of disciplines and departments to offer courses to satisfy this requirement. We describe here the requirements for the first course in Quantitative Reasoning, focusing on Mathematical, Logical, and Statistical Foundations. Statistical elements in this course are at the level of basic skills in descriptive statistics; the second course in Quantitative Reasoning will focus on Statistical Reasoning and Inference and is described in its own template.

Learning Outcomes

As with all General Education courses, students in this course will demonstrate information literacy by their measurable ability to independently locate, identify and utilize information resources from a variety of credible sources. They will be able to understand the ethics surrounding the information. Using critical thinking skills, students will extract, evaluate and validate information as well as organize, communicate and accurately use it in their research.

Courses designed to meet the Mathematical, Statistical, and Logic Foundations requirement will demonstrate how the course elements (e.g., structure, activities, assignments, projects, homework, papers, and exams) will contribute to the following student learning objectives.

Learning Outcomes: Students will be able to:

demonstrate proficiency with number sense (e.g., order of magnitude, estimation, comparisons, effect of operations) and with functional relationships between two or more sets of variable values (i.e., when one or more variables depend upon, or are functions of, other variables) and also relate different representations of such relations (e.g., algebraically or symbolically, as tables of values, as graphs, and verbally). Relations between numerical values must be included in order that students will be prepared for the Statistical Inferential Reasoning course.

- 2. apply fundamental elements of mathematical, logical, or statistical knowledge to model and solve problems drawn from real life. In this modeling process, students will be able to:
 - a. recast and formulate everyday problems onto appropriate mathematical or logistical systems (viz. algebra, geometry, logic), represent those problems symbolically (i.e., in numbers, letters, or figures), and express them visually or verbally.
 - b. apply the rules, procedures, and techniques of appropriate deductive systems (e.g., algebra, geometry, logic) to analyze and solve problems.
 - c. apply correct methods of argument and proof to validate (or invalidate) their analyses, confirm their results, and to consider alternative solutions.
 - d. interpret and communicate their results in various forms, including in writing and speech, graphically and numerically.
 - e. identify and evaluate arguments that contain erroneous or fallacious reasoning (e.g., unsound mathematical or logical inferences), and detect the limitations of particular models or misinterpretations of data, graphs, and descriptive statistics.

At least 30% of the course should address objective (1), and at least 40% of the course should address objective (2). (If the course has more than three credit hours, then these percentages refer to the equivalent time of a three credit hour course.)

Guidelines for Course Designers

There are definite needs and rich opportunities for many different departments (besides the ones currently addressing the current USP Basic Skills and Inference requirements) to develop and offer courses. Courses at our benchmark institutions that are addressing their own QR requirements are drawn from mathematics, statistics, engineering, natural and physical sciences, humanities, social sciences, art, and other disciplines.

The course should have a central applications-driven, problem-solving focus, with particular attention to problems of potential "real-life" relevance to the students. The students should be actively engaged in modeling and problem-solving (though the problems and modeling may range from relatively straightforward to complex). There are various technology tools (e.g., interactive applets or computer programs) that can assist in visualizing concepts and making models, as well as reinforcing basic skills. The desire is that the course will develop such quantitative reasoning skills as to be generally useful to students in their further studies, work, and engagement in civic life.

The course will embed information literacy incorporating independent learning and utilizing active learning techniques, technology, instruction and consultations and/or tutorials. Instructors will collaborate with librarians to create a course-relevant component developing lifelong learning skills allowing students to identify, evaluate, utilize, apply and communicate information, a critical competency in becoming a contributing member of society.

The course will ensure that students will create at least one assessable product (e.g., the result of modeling and solving a problem) that can be shared with UK's Assessment Office to contribute to the assessment of the General Education program.

It is to be assumed that students will enter the course with an appropriate mastery of high school mathematics through Algebra I, Algebra II, and Geometry to earn a Math ACTE score of at least 19, or the equivalent.

Statistical Inferential Reasoning

Courses that would qualify to be one of the "3-hour course(s) devoted to a conceptual and practical understanding of statistical inferential reasoning" should be focused on the student's ability to evaluate the efficacy of claims based on statistical constructs and to understand and articulate important risks that these claims often address, both through the formal science of statistical inference and informal activity of human inference. These courses should not have computations and derivations as their primary focus; neither should they be abstract reasoning courses devoid of numerical data.

Toward that end, it is expected that any course that qualifies must exhibit a syllabus that offers convincing evidence that, upon successfully completing this course, students will be able to:

- A. (At least 25% of the course) Evaluate common claims arising from the formal statistical inference conveyed in margins of error and confidence intervals. Students must be able to articulate the sense in which margins of error and confidence intervals address and purport to quantify risks that are of practical interest. Although skill in the computation of these quantities is an acceptable by-product, the demonstrated skill set **must not** be confined to, or even largely focused on the computation of these quantities,. In particular, the student must:
 - 1. Be able to connect the uncertainty of sampling variability with margins of error and confidence intervals. This connection needs to be formal in the sense that the student needs to be able to demonstrate an understanding of the roles of sampling distributions, and standard scores, as well as the central limit theorem (non-mathematical treatment) in the production, but more importantly, the interpretation of margins of error and confidence intervals.
 - 2. Be able to demonstrate an understanding that some of the other major sources of uncertainty, such as biased samples and questionnaires that are worded in a biased or misleading fashion are not addressed by margins of error or confidence intervals.
- B. (At least 25% of the course) Evaluate common claims arising from the formal statistical inference conveyed in null hypothesis testing associated with statistically designed experiments. Students must be able to articulate the sense in which null hypothesis testing addresses and purports to quantify risks that are of practical interest. Although skill in the actual testing of such hypotheses is an acceptable by-product, the demonstrated skill set **must not** be confined to, or even largely focused on the actual construction of such tests. In particular, the student must

- 1. Be able to demonstrate a substantive understanding of "statistical significance," and the sense in which p-values and null hypothesis testing offer a useful and practical articulation of risk assessment. To do this, the student must also be able to demonstrate mastery of the basic language of statistical experimental design and null hypothesis testing, and articulate the role that statistical modeling plays in the development and interpretation of "statistical significance."
- 2. Be able to articulate the strengths and weaknesses of using classical null hypothesis testing as a decision tool. Students should understand the sense in which common hypothesis testing, and the associated "significance" addressed in media, is intimately related to a perspective that looks for evidence against a claim, and infers about the truth of that claim based on the weight of that evidence
- C. (At least 20% of the course) Evaluate common claims that arise from statistical constructs, like charts and graphs, tables and numerical summaries, through the important, but informal, act of human inference. Although skill in the actual construction of these constructs is an acceptable by-product, the demonstrated skill set must not be confined to, or even largely focused on these constructions. In particular, students must:
 - 1. Be able to demonstrate an understanding of the challenges that confront informal inferences arising from these kinds of statistical entities and offer evidence that they can construct these inferences in a rational and informed manner.
 - 2. Be able to discuss the practical importance of effective conditional reasoning (e.g. false positives, Prosecutor's paradox); the importance of hidden variables and confounding (e.g. Simpson's paradox); the issue of association versus correlation and correlation and causation; the importance of having the right and/or enough information; and the problem of misinterpreting randomness.
- D. (At least 5% of the course) Demonstrate information literacy by their measurable ability to independently identify and utilize appropriate information resources from a variety of sources. Instructors will collaborate with librarians to create a course-relevant component developing lifelong learning skills allowing students to identify, utilize, evaluate, apply and communicate information, a critical competency in becoming a contributing member of society.

The prerequisite for courses in this category is a course in the proposed category of "quantitative foundations."

Guidelines for Course Designers

The ways in which the course outcomes are achieved, and the contexts in which the concepts are motivated, are the purview of individual departments, colleges, and instructors. However, while many of the concepts discussed in this course category are, at their root, complex mathematical concepts (e.g. the Central Limit Theorem), this course *is not* intended to be a mathematically complex course. Rather, the complexity of the course will likely be rooted in the ideas being discussed and the ways in which core concepts in statistical science connect to and surface in activities as common as reading the morning newspaper. With this in mind, the following suggestions are offered:

Curriculum-Embedded, Performance-Based Assessable Products

All students must create at least one assessable product that can be shared with the University's Assessment Office and the course syllabus must make clear what that product is. Individual instructors (or departments) are encouraged to consult with the Director of Assessment at the University, prior to the construction of a new syllabus. Rather than test knowledge or particular techniques, the assessment tool(s) should allow students to demonstrate an understanding of how statistical inference is used in decision making and to appraise the efficacy of statistical arguments that are reported for general consumption. That is, the assessment, too, should focus upon real world applications of learning outcomes A-D above. We recommend that the tool be validated, structured to allow electronic submission, and that an appropriate assessment rubric be developed based upon these criteria.

<u>Community, Culture and</u> Citizenship in a Diverse U.S. Society

Courses in this area lay the foundation for effective and responsible participation in a diverse society by preparing students to make informed choices in the complex or unpredictable cultural contexts that can arise in U.S. communities. These courses may be disciplinary or interdisciplinary and should engage students in interactive learning techniques such as debates, digital documentaries, guided discussions, service-learning projects, and simulations, as well as develop their information literacy. Students completing this requirement will achieve the following learning outcomes:

- A. Demonstrate an understanding of historical, societal, and cultural differences, such as those arising from race, ethnicity, gender, sexuality, language, nationality, religion, political and ethical perspectives, and socioeconomic class.
- B. Demonstrate a basic understanding of how these differences influence issues of social justice and/or civic responsibility.
- C. Demonstrate an understanding of historical, societal, and cultural contexts relevant to the subject matter of the course.
- D. Demonstrate an understanding of at least two of the following, as they pertain to the subject matter of the course:
 - a. Societal, cultural, and institutional change over time
 - b. Civic engagement
 - c. Regional, national, or cross-national comparisons
 - d. Power and resistance
- E. Participate in at least two assessable individual or group projects that focus on personal and/or collective decision-making. The projects should require students to identify and evaluate conflicts, compromises, and/or ethical dilemmas. These projects shall demonstrate a basic understanding of effective and responsible participation in a diverse society.

Global Dynamics

Courses satisfying this requirement will focus attention on the student's civic role and place in the world and the dynamic interaction between locale (place and people) and global processes (international and transnational). In order for UK students to be prepared for careers in a globalized world, they must understand and appreciate global cultural diversity and the impacts of globalization processes. This new knowledge and attitude will also lead to the student's heightened awareness of her/his own culture and society. Issues like, but not limited to, environmental concerns (e.g., climate change, soil depletion, transboundary pollution), the built environment (e.g., architecture, urban planning, sustainable design), public health (e.g., sanitation, local-global disease transfer, nuclear and coal-fired energy risks), political and socio-economic structures and policies (e.g., social and political processes; diverse public policies; and social and governmental regulations) and the interaction of world cultures (including music, art, religions, literature and folklore) are among the topics that may be explored in the many possible courses fulfilling this part of the general education curricular framework.

Learning Outcomes

- 1. Demonstrate a grasp of the origins and shaping influence of human diversity and issues of equality in this world.
- 2. Demonstrate an understanding of the civic, and other, complexities and responsibilities of actively participating in a diverse, multiethnic, multilingual world community.
- 3. Demonstrate an awareness of how individual and collective decision making and civic responsibilities often generate ethical dilemmas, conflicts, and trade-offs that must be thoughtfully evaluated, weighed, and resolved.
- 4. Demonstrate an awareness of major elements of at least one non-US culture or society, and its relationship to the 21st century context. However, this does not preclude a studied examination of the historical evolution of such issues, or an emphasis upon one prominent time period.
- 5. Demonstrate an understanding of how local features (economic, cultural, social, political and religious) of urban or rural communities, ethnicities, nations and regions are often linked to global trends, tendencies, and characteristics that often mutually shape one another.
- 6. Demonstrate an understanding of at least two of the following, as they pertain to the subject matter of the course: a) Societal, cultural, and institutional change over time; b) Civic engagement; c) Cross-national and/or comparative issues; d) Power and resistance

Guidelines for Course Designers:

- 1. Students will complete a project accounting for at least 15% of the course grade that explores a significant issue or problem from a global perspective.
- 2. The non-US focus must constitute at least 50% of the course.

Faculty Curricular Teams

Intellectual Inquiry

Humanities Team

Jeanmarie Rouhier-Willoughby

(Convener) (AS-MCL)j.rouhier@uky.eduBrad Carrington (LIS)brad.carrington@uky.eduJames Hertog (CIS)jhertog@email.uky.edu

Brandon Look (AS-PHI) look@uky.edu

Steve Parker (ED-KHP) spark01@email.uky.edu
Alfred D. Shapere (AS-PHY) shapere@uky.edu
Gretchen Starr-Lebeau (AS-HIS)starrle@email.uky.edu
Cecilia Wang (FA) cecilia.wang@uky.edu
Lisa Zunshine (AS-ENG) zunshin@uky.edu

Physical, Natural and Mathematical Sciences Team

Ruth Beattie (Convener) (AS-BIO) rebeat1@email.uky.edu
Richard Andretta (HS) randr2@email.uky.edu
Janette Carver (LIS) jbcarv1@email.uky.edu
Czarena Crofcheck (AG) crofcheck@uky.edu
Janet Eldred (AS-ENG) eldred@email.uky.edu
Michael Kovash (AS-PHY) michael.kovash@uky.edu
David Leep (AS-MATH) leep@ms.uky.edu

Jonathan Lifshitz (ME-SCoBIRC) jlifs2@email.uky.edu
Mark Meier (AS-CHEM) mark.meier@uky.edu
David Moecher (AS-GEO) moker@uky.edu

Social Sciences Team

James Hougland (Convener)

jghoug2@email.uky.edu (AS-SOC) jjclar00@uky.edu James Clark (SW) Deborah Crooks (AS-ANTH) dlcrooks@uky.edu Richard Fording (AS-PS) rford@uky.edu Jonathan Golding (AS-PSY) golding@ukv.edu Shawn Livingston (LIS) sdlivi00@email.uky.edu Leigh Maynard (AG) leigh.maynard@uky.edu gmswan3@email.uky.edu Gerry Swan (ED-EDC) kdwagn00@email.ukv.edu Kathleen Wagner (NU)

Matthew Zook (AS-GEOG)

Arts & Creativity Team

Ben Withers (Convener) (FA) bcwith2@email.uky.edu Rayma Beal (ED) rkbeal01@email.uky.edu Lance Brunner (FA) Lance.Brunner@uky.edu

zook@uky.edu

Elizabeth Debski (AS-BIO) debski@uky.edu Nelson Fields (FA-Theatre) nelson.fields@uky.edu Gregory Luhan (DE) gregory.luhan@uky.edu Thomas Nieman (AG-LANDS) tnieman@email.uky.edu

William Seales (EN) seales@uky.edu
Meg Shaw (LIS) meg.shaw@uky.edu
Kathleen Urch (CIS) kakie.urch@uky.edu

Communications

Writing I

Roxanne Mountford (Convener) (AS-ENG) rdmo222@uky.edu Rob Aken (LIS) robaken@uky.edu Jennifer Bartlett (LIS) jbart3@email.uky.edu Anna Bosch (AS-LIN) anna.bosch@uky.edu bill.endres@uky.edu William Endres (ENGR) dshuls00@email.uky.edu David Hulse (BE) Judith Lesnaw (AS-BIO) judith.lesnaw@uky.edu Mary Roseman (AG-NSF) mrose2@email.uky.edu

Communication

Deanna Sellnow (Convener) (CIS) deanna.sellnow@uky.edu staceyg@email.uky.edu Stacey Greenwell (LIS) David Hardesty (BE) dmhard3@email.uky.edu Rob Jensen (FA) robert.jensen@uky.edu Derek Lane (CIS) Derek.Lane@uky.edu klewis@uky.edu Karen Lewis (DE) Roxanne Mountford (AS-ENG) rdmo222@uky.edu Randall Roorda (AS-ENG) rroorda@ukv.edu Ruth Staten (NU) rrstat00@email.uky.edu Craig Wood (AG-EXT) woodch@email.uky.edu

Quantitative Reasoning

Math, Logic and Stats Foundations

Carl Lee (Convener) (AS-MATH)lee@ms.uky.edu Kenneth Calvert (ENGR-CS) ken.calvert@uky.edu mark.gebert@ukv.edu Mark Gerbert (AS-STA) xma2@email.uky.edu Xin Ma (ED) Sue Nokes (AG-BAE) sue.nokes@uky.edu Alan Perreiah (AS-PHI) pera@uky.edu Jane Peters (FA) jane.peters@uky.edu mkrayens@uky.edu Mary Kay Ravens (NU) jakayla.robbins@uky.edu Jakayla Robbins (AS-MATH) Susan K. Smith (LIS) Susan.Smith@uky.edu Connie Wood (AS-STA) cwood@email.uky.edu

Statistical Reasoning

Bill Rayens (Convener) (AS-STA) rayens@uky.edu Debra Aaron (AG) daaron@email.uky.edu Arne C. Bathke (AS-STA) arne@email.uky.edu Chris Bollinger (BE) crboll@email.ukv.edu Kelly Bradley (ED) kdbrad2@uky.edu Rick Brewer (LIS) rabrew02@email.uky.edu Patricia Burkhart (NU) pvburk2@email.uky.edu david.fardo@uky.edu David Fardo (PH) David Leep (AS-MATH) leep@email.uky.edu rlorch@email.uky.edu Robert Lorch (AS-PSY) William E. Murphy (ENGR) william.murphy@uky.edu katz@email.uky.edu Kaveh Tagavi (ENGR)

Citizenship

U.S. Citizenship

Sonja M. Feist-Price (Convener) (ED) smfeis@email.uky.edu

Joanna Badagliacco (AS-SOC) jmb@email.uky.edu Kate Black (LIS) Kate.Black@uky.edu David H. Bradshaw (AS-PHI) dbradsh@email.uky.edu Brian Dineen (BE) brdine2@email.uky.edu avdool2@email.uky.edu Andy Doolen (ENG) vpwick0@email.uky.edu Vanessa Jackson (AG) linda.levstik@uky.edu Linda Levstik (ED) Joanne Melish (AS-HIS) joanne.melish@uky.edu Jeroen van den Hurk (DS-HP) J.vandenHurk@uky.edu Stephen Voss (AS-PS) dsvoss@email.uky.edu

Global Citizenship

Ernest Yanarella (Convener) (AS-PS) ejyana@email.uky.edu

Ihsan Bagby (AS-MCL) iabagb2@uky.edu Beth Barnes (CIS) bbarnes@email.uky.edu Horace Bartilow (AS-PS) pascal@email.uky.edu Larry Grabau (AG/PSS) larry.grabau@uky.edu gehogg01@uky.edu Gordon Hogg (LIS) Claudia Hopenhayn (PbH-EPI) cmhope0@uky.edu Noemi G. Lugo (FA) nglugo00@email.uky.edu Tad Mutersbaugh (AS-GEOG) tmute2@uky.edu

Tad Mutersbaugh (AS-GEOG) tmute2@uky.edu
Keiko Tanaka (AG) ktanaka@email.uky.edu
Monica Udvardy (AS-ANT) udvardy@email.uky.edu